THE JOY OF MINIATURE ROSES INDOORS

This article has been edited from an original written by Larry Toole of Little Silver, New Jersey, that appeared in <u>The Rose Vine</u>, a publication of the Penn-Jersey District of the American Rose Society.

Those of you who have seen a potted miniature rose in full bloom during the winter, know the joy and excitement of having it in the house. The color brightness is generally outstanding, attracts more attention than other winter-flowering plants and adds warmth to a house needed at that time of the year.

Generally any variety of miniature rose which is vigorous and repeats well outdoors is a good choice for use indoors. Some found to be successful are Baby Darling (at right), Little Jackie, Chasin' Rainbows, Chattem Centennial, Deep Velvet, Mary Marshall, Minnie Pearl, Party Girl, Rainbow's End, Red Imp and Snow Bride.

The rose will give far better blooming results if it has been exposed to a period of dormancy before encouraging new growth indoors. This dormancy can be a natural one incurred



Climbing B aby Darling, from tinypetalsnursery.com

outdoors or an induced dormancy incurred indoors. A natural dormancy is when the plant has been exposed to a hard frost, not just a light frost. In most areas this means that the plant is dug up and potted in November or December and then forced to bloom.

If you intend to induce dormancy, a plant can be dug up anytime prior to a ground freeze. Induced dormancy requires the reduction of three elements, i.e. light, temperature and water. To establish a state of induced dormancy, the plant is potted but NOT pruned. Leaves are left on. Water is applied initially and thereafter withdrawn. Partial water is replenished every four weeks if the target date for blooming requires longer than 3 weeks. At the same time, light is completely withheld from the plant so that it is continuously in total darkness. This can be accomplished by inverting over the potted plant a waste basket. Dormancy is also helped by reducing the temperature, i.e. placing the potted plant in a refrigerator at 35 to 380 F., or in an attached garage, an unheated basement or a spare room that is kept cool.

For complete induced dormancy, as mentioned, a minimum of 3 weeks time is required or up to 6 weeks prior to the expected blooming time. At the end of this time all leaves should have fallen off the plant and the stems are still green. (It is O.K. to peek now and then to check on progress.) You are now ready to start forcing growth.

Before we get too far along, let's talk about the kind of soil to use when you pot up the rose. Generally speaking, soil should be sterile. Soil from the garden should be heat-treated at 100 to 200 degrees F. in the oven for an hour. Also, soil should be mixed so that you have a 50/50 mix of garden soil and peat moss. The addition of 10% sand is helpful. A good supply of peat moss is Pro-Mix which is a combination of peat moss, perlite and a touch of fertilizer. To summarize, a typical soil recipe is 45 parts of Pro-Mix, 45 parts of sterilized garden soil and 10

parts of sand. To this, add 1 teaspoon of dolomitic lime, 1 tablespoon of superphosphate and 1 (one) tablespoon of bone meal for every quantity equivalent to the volume of a gallon of water. (Most potting soils or mixes are too acid; hence the need for lime.) Do not add any nitrogen or other balanced fertilizer at this point.

When digging a plant up from unfrozen soil, water the plant thoroughly beforehand. Try to retain some soil. Either a plastic or clay pot is satisfactory. I prefer clay because there is less chance of the water accumulating in the pot and becoming sour and affecting growth. At the outset of the new growth stage, of course, there are no leaves and very little evaporation takes place. Use at least a 6" diameter pot. Once potted, the plant and the soil surface is sprayed with Orthene or Isotox plus Funginex or equivalent. Do this outside. In the case of natural dormancy, prune the plant to 4 to 5 inches tall and bring indoors to where it is to be grown. In the case of the plant that will be exposed to induced dormancy, the reason that you don't prune it immediately is that it needs to take back into its system the energy from its leaves and canes. It is only immediately before the forcing stage that it is pruned back to 4 or 5 inches.

We are now ready to start forcing new growth six weeks prior to your target date (for blooms). Ideally, a set of regular florescent light fixtures either in your basement or in a spare room make a good growing atmosphere. Place the just pruned potted plants so that the tops of the cane's are about 3 inches under the tubes. Use a timer to have the lights on 18 hours and off for 6 hours. Some people use the sealed halogen lights on the same time schedule as above or on 24 hours a day. The six week schedule to produce blooms is based on 18 hours on and 6 hours off. A sunny window can also be used but daylight hours are short and some days are cloudy. A window arrangement must be supplemented with the sealed halogen bulbs to give at least the required 18 hours of light. Incidentally, the halogen bulbs are now available at electrical supply houses in standard sized sockets to fit your fixtures. Make up a fertilizer solution of Peter's or Rapid-Gro using 1/4 strength. Apply thoroughly to your plants at the outset and repeat once a week. Never let the plants sit in water. Check to see if any excess is draining out after watering. Be sure to drain off the excess.

When growing miniature roses indoors, the low humidity in your house when the furnace is on and the already low moisture content of the air in winter, all add up to stress conditions for freely growing plants. One way to increase the humidity when growing plants under fluorescent fixtures is to lay a large sheet of plastic under the plants and bring it up and tie it around the fluorescent fixture. Placing a pan of water inside will keep a moist atmosphere for your growing plants. It is a very effective treatment for low humidity. In the case of window growing, place the pots on pans or trays that are 50% larger than the pots. These trays are filled with stones and water to just below the bottom of the pots. The moist air will surround the plant without the pots sitting in water. Add some Clorox to the water in the tray to prevent the formation of green mold on the stones.

Another indoor growing problem is that of spider mites. At the first sign of any slight yellowing of the leaves, remove the potted plant, wrap some soft plastic around the top to hold the soil and use a bucket of water containing a mild detergent and immerse the top of the plant completely in the water. Swish it around a few times and remove. And then wash the foliage with a spray of water. This is very effective in removing mites. The main idea is that once you

suspect them act fast! The plants under the florescent lights inside the plastic tent should be sprayed every 10 days to prevent mildew forming. Avoid using products indoors that are normally used outdoors. One safe material to use indoors is Bicarbonate of Soda at the rate of 1 (one) tablespoon per gallon. Keep the plants watered and the soil always moist. Avoid overwatering. You will be pleased with number of flower buds forming and with the overall bloom in six weeks. At that time, your plant can be removed from your tent and placed in a prominent spot in your house to be enjoyed by all. To keep it blooming, set it on a large tray filled with stones, set into water, similar to the window method described above. If you cannot maintain sufficient light, try one of the sealed halogen bulbs in a goose-neck type desk lamp with the light directly on the plant.

Bloom size (of indoor plants) will probably be the same as regular plants but timing could be slightly different, i.e. maybe seven weeks from dormancy to bloom instead of six. Experience will tell.

I like to see a plant go through several cycles of bloom outdoors to determine if it is worthwhile to be used for indoor culture. In addition, a well established plant will give better results. After all, with the extra effort put forth in preparing for good quality blooms indoors, you might as well get started with the best material you have. Like outside growing of roses, the extra effort is very rewarding. In fact, to get a plant fully loaded with blooms in the middle of winter is a thrill and enhances your home with its beauty. May you enjoy a similar experience this winter.

JANUARY-FEBRUARY, 1993 MRS NEWSLETTER

Maryland Rose Society Newsletter Albert Ford, *Editor* http://www.mgs.md.gov/misc/mdrose